May 22, 2000

Mr. Robert H. Thomas
International Paper Co.
PO Box 539
Terre Haute, Indiana 47808

Re: Minor Source Modification No:
167-11920-00022

Dear Mr. Thomas:

International Paper Co. applied for a Part 70 operating permit on December 6, 1996 for an integrated, semi-chemical, pulp and paper mill. An application to modify the source was received on February 22, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

1. Thermal Oxidizer, identified as RTO-1, with a minimum oxidizing zone temperature of 1600 EF, controlling emissions from the primary tank condenser (S/V 067) and the evaporator (S/V 036), and exhausting to S/V 096.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (812) 462-3433 and ask for Rob Harmon or extension 14.

Sincerely,

George M. Needham
Director
Vigo County Air Pollution Control

Attachments
RKH

cc: U.S. EPA, Region V
IDEM-OAM, Compliance Data Section - Karen Nowak
IDEM-OAM, Administrative and Development - Janet Mobley
IDEM-OAM, Technical Support and Modeling - Michele Boner
IDEM-OAM, Mindy Hahn
IDEM-OAM, Winter Bottum

# PART 70 MINOR SOURCE MODIFICATION
# OFFICE OF AIR MANAGEMENT
# and
# VIGO COUNTY AIR POLLUTION CONTROL

**International Paper Co.**
**2401 Prairieton Ave.**
**Terre Haute, Indiana 47802**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

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|---|---|
| Source Modification No.: 167-11920-00022 | |
| Issued by:<br>George M. Needham, Director<br>Vigo County Air Pollution Control | Issuance Date: |

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## SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and Vigo County Air Pollution Control (VCAPC). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary integrated, semi-chemical, pulp and paper mill.

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|---|---|
| Responsible Official: | Robert H. Thomas |
| Source Address: | 2401 Prairieton Ave., Terre Haute, Indiana 47802 |
| Mailing Address: | PO Box 539, Terre Haute, Indiana, 47808 |
| Phone Number: | (812) 234-6688 |
| SIC Code: | 2631 |
| County Location: | Vigo County |
| County Status: | Maintenance Attainment for Sulfur Dioxide<br>Attainment for all other criteria pollutants |
| Source Status: | Part 70 Permit Program<br>Major Source, under PSD Rules;<br>Major Source, Section 112 of the Clean Air Act |

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

1. Thermal Oxidizer, identified as RTO-1, with a minimum oxidizing zone temperature of 1600 EF, controlling emissions from the primary tank condenser (S/V 067) and the evaporator (S/V 036), and exhausting to S/V 096.

### A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Local Agency Requirement

This permit shall also be considered to be the local permit, a separate application and approval is not required.

## SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) after issuance of this approval, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM and VCAPC, upon request and shall be subject to review and approval by IDEM, OAM and VCAPC. IDEM, OAM and VCAPC, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

**Testing Requirements [326 IAC 2-7-6(1)]**

C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM and VCAPC.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management

Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM and VCAPC within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM and VCAPC, if the source submits to IDEM, OAM and VCAPC, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

C.8 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM and VCAPC upon request and shall be subject to review and approval by IDEM, OAM and VCAPC. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of

326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.9 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM and VCAPC, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM and VCAPC shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM and VCAPC within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM and VCAPC reserve the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM and VCAPC that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM and VCAPC may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

C.10 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM and VCAPC may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.11 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM and VCAPC, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or VCAPC makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or VCAPC within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.12 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM and VCAPC, on or before the date it is due.

(c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

## SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Thermal Oxidizer, identified as RTO-1, with a minimum oxidizing zone temperature of 1600 EF, controlling emissions from the primary tank condenser (S/V 067) and the evaporator (S/V 036), and exhausting to S/V 096.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart S.

D.1.2 Pulp and Paper Industry NESHAP [326 IAC 2-7-5][40 CFR Part 63, Subpart S]

This facilities are subject to 40 CFR Part 63, Subpart S. A copy of the rule is attached. The facility shall be in compliance with all applicable provisions of this rule no later than April 16, 2001.

D.1.3 Hazardous Air Pollutant (HAP) Emissions [40 CFR 63 Subpart S]

Pursuant to 40 CFR 63.443(b)(1), the HAP emissions from the Low Volume High Concentration (LVHC) system at existing semi-chemical pulp mills shall be controlled. LVHC system is defined by the subpart to be: the collection of equipment including the digester, turpentine recovery, evaporator, steam stripper systems, and any other equipment serving the same function as those previously listed.

(a) The LVHC system shall be enclosed and vented into a closed-vent system and routed to a control device to reduce total HAP emissions. The enclosures and closed-vent system shall meet the requirements specified in Condition D.1.4. The control device shall meet the following minimum requirements:
  (1) Reduce total HAP emissions by 98 percent or more by weight; or
  (2) Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to ten (10) percent oxygen on a dry basis; or
  (3) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 EC (1600 EF) and a minimum residence time of 0.75 seconds; or
  (4) Reduce total HAP emissions using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone.

(b) Reported periods of excess emissions shall not be a violation provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed one percent for control devices used to reduce the total HAP emissions from the LVHC system.

D.1.4 Standards for Enclosures and Closed-Vent Systems. [40 CFR 63.450]

(a) Each enclosure and closed-vent system specified in condition D.1.3 for capturing and transporting vent streams that contain HAP shall meet the requirements specified in paragraphs (b) through (d) of this condition:

(b) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in Condition D.1.6(d). Each enclosure or hood

opening closed during the initial performance test specified in Condition D.1.6(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(c) Each component of the closed-vent system used to comply with Condition D.1.3 that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in Condition D.1.6.

(d) Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in Condition D.1.3 shall comply with either of the following requirements:
(1) On each bypass line, the Permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or
(2) For bypass line valves that are not computer controlled, the Permittee shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

**Compliance Determination Requirements**

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)][40 CFR 63.457]

(a) An initial performance test is required for all emissions sources subject to the limitations in Condition D.1.3, except those controlled by a combustion device that is designed and operated as specified in Condition D.1.3(a)(3) or (a)(4).

(b) For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in Condition D.1.3, the Permittee shall comply with the applicable procedures in 40 CFR 63.457(b).

(c) To measure detectable leaks for closed-vent systems as specified in Condition D.1.4, the Permittee shall comply with the applicable procedures in 40 CFR 63.457(d).

(d) To demonstrate negative pressure at process equipment enclosure openings as specified in Condition D.1.4, the Permittee shall use one of the following:
(1) An anemometer to demonstrate flow into the enclosed opening;
(2) Measure the static pressure across the opening;
(3) Smoke tubes to demonstrate flow into the enclosure opening; or
(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

(e) For purposes of complying with the requirements in Condition D.1.3, the Permittee shall measure the total HAP concentration as one of the following:
(1) As the sum of all individual HAP's; or
(2) As methanol.

(f) To demonstrate compliance with the mass emission rate, mass emission rate per megagram of ODP, and percent reduction requirements for vent gas streams specified in Condition D.1.3, the Permittee shall use the procedures specified in 40 CFR 63.457(i).

(g) To demonstrate compliance with the total HAP concentration limit of 20 ppmv in Condition D.1.3, the concentration measured using the appropriate methods shall be corrected to 10 percent oxygen using the procedures specified in 40 CFR 63.457(k).

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

D.1.7 Monitoring Requirements [40 CFR 63.453]

(a) The Permittee shall install, calibrate, certify, operate and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in 40 CFR 63.2) as specified in paragraphs (b) through (f) of this condition. The CMS shall include a continuous recorder.

(b) A CMS shall be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs for each thermal oxidizer used to comply with the requirements of Condition D.1.2. If the Permittee chooses to comply with the requirements in Condition D.1.3(a)(2) or (a)(3), the Permittee shall monitor the parameter specified and for the temperature and concentration limits specified.

(c) Each enclosure and closed-vent system used to comply with Condition D.1.4 shall comply with the requirements specified below:

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in Condition D.1.4 shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.

(2) Each closed-vent system required by Condition D.1.4 shall be visually inspected every 30 days and at other times as requested by IDEM, OAM and VCAPC. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in Condition D.1.4 measured initially and annually by the procedures in Condition D.1.6.

(4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in Condition D.1.6.

(5) The valve or closure mechanism specified in Condition D.1.4 shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

(6) If an inspection required by (c)(1) through (c)(5) of this condition identifies visible defects in ductwork, piping, enclosures or connections to covers required by Condition D.1.4, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(A) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(B) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified.

(d) If the Permittee uses a control device, technique or an alternative parameter other than those specified in (b) through (c) of this condition, the Permittee shall install a CMS and

establish appropriate operating parameters to be monitored that demonstrate, to IDEM, OAM and VCAPC's satisfaction, continuous compliance with the applicable control requirements.

(e) To establish or reestablish the value for each operating parameter required to be monitored under (b) and (d) of this condition or to establish appropriate parameters for (d) of this condition, the Permittee shall use the procedures specified in 40 CFR 63.453(n).

(f) If the Permittee uses a control device to comply with Condition D.1.3 shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under paragraphs (a) through (e) of this condition. Except as provided in Condition D.1.3, operation of the control device below the minimum operating parameter values or above the maximum operating parameter values established under these conditions or failure to perform procedures required by these conditions shall constitute a violation of the applicable emission standard and be reported as a period of excess emissions.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

D.1.8 Record Keeping Requirements [40 CFR 63.454]

(a) The Permittee shall comply with the recordkeeping requirements of 40 CFR 63.10 of subpart A, and the requirements in paragraphs (b) through (c) of this condition for the monitoring parameters specified in Condition D.1.7.

(b) For each applicable enclosure opening, closed-vent system, the Permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:
(1) Date of inspection;
(2) The equipment type and identification;
(3) Results of negative pressure tests for enclosures;
(4) Results of leak detection tests;
(5) The nature of the defect or leak and the method of detection (i.e. visual inspection or instrument detection);
(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
(7) Repair methods applied in each attempt to repair the defect or leak;
(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
(10) The date of successful repair of the defect or leak;
(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and
(12) The duration of the use of bypass valves on computer controlled valves.

(c) The Permittee shall record the CMS parameters specified in Condition D.1.7 and meet the requirements specified in (a) of this condition for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this section due to a process change or modification.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements [40 CFR 63.455]

(a) The Permittee shall comply with the reporting requirements of 40 CFR 63, subpart A and all the following requirements in this condition. The initial notification report specified under 40 CFR 63.9(b)(2) (subpart A) shall be submitted immediately if it has not yet been submitted.

(b) The Permittee shall meet the requirements specified in (a) of this condition upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of this subpart due to a process change or modification.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR MANAGEMENT
# COMPLIANCE DATA SECTION
# and
# VIGO COUNTY AIR POLLUTION CONTROL

## PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: International Paper, Co.
Source Address: 2401 Prairieton Ave, Terre Haute, Indiana 47802
Mailing Address: PO Box 539, Terre Haute, Indiana 47808
Source Modification No.: 167-11920-00022

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.**

Please check what document is being certified:

**9** Test Result (specify) _____

**9** Report (specify) _____

**9** Notification (specify) _____

**9** Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

# Indiana Department of Environmental Management
# Office of Air Management
# and
# Vigo County Air Pollution Control

## Technical Support Document (TSD) for a Part 70 Minor Source Modification.

**Source Background and Description**

| | |
|---|---|
| **Source Name:** | **International Paper Co.** |
| **Source Location:** | **2401 Prairieton Ave., Terre Haute, Indiana, 47802** |
| **County:** | **Vigo County** |
| **SIC Code:** | **2631** |
| **Operation Permit No.:** | **T 167-7358-00022** |
| **Operation Permit Issuance Date:** | **PN ended April 4, 2000** |
| **Minor Source Modification No.:** | **MSM 167-11920-00022** |
| **Permit Reviewer:** | **Rob Harmon - VCAPC** |

Vigo County Air Pollution Control (VCAPC) has reviewed a modification application from International Paper Co. relating to the construction of the following emission units and pollution control devices:

1. Thermal Oxidizer, identified as RTO-1, with a minimum oxidizing zone temperature of 1600 EF, controlling emissions from the primary tank condenser (S/V 067) and the evaporator (S/V 036), and exhausting to S/V 096.

**History**

On February 22, 2000, International Paper Co. submitted an application to VCAPC requesting approval to install control equipment which is required by the Pulp and Paper NESHAP (40 CFR 63, Subpart S). International Paper Co. (as Weston Paper and Manufacturing Co.) submitted a Part 70 application on December 6, 1996. This permit has not yet been issued, but it has been through the 30 day public comment period.

**Enforcement Issue**

The source has the following enforcement actions pending:

(1) International Paper Co. was issued a Notice of Violation for failure to meet the Continuous Opacity Monitoring Regulation, by VCAPC on May 27, 1999. Since VCAPC and International Paper Co. could not come to an agreement on the terms of an Agreed Order the action was referred to the Indiana Department of Environmental Management - Office of Enforcement.

**Stack Summary**

| Stack ID | Operation | Height (feet) | Diameter (feet) | Flow Rate (acfm) | Temperature ($^0$F) |
|---|---|---|---|---|---|
| | | | | | |
| S/V 096 | Thermal Oxidizer RTO-1 | 60 | 1 | 2150 | 300 |
| | | | | | |

**Recommendation**

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 22, 2000. Additional information was received on May 1, 2000.

**Emission Calculations**

This modification is the addition of control equipment in order to comply with the MACT requirements under 40 CFR 63, Subpart S. As such the emissions from the source will actually decrease as a result of this modification. There are going to be an insignificant amount of combustion related emissions, but are no calculations to present. The source will still be PSD major after the modification, and since there would be a net emissions decrease the modification would not be subject to the PSD requirements.

**Justification for Modification**

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(3) for control equipment that does not increase emissions but which requires substantial changes in monitoring as well as 326 IAC 2-7-10.5(d)(6) for modifications subject to a NESHAP.

**County Attainment Status**

The source is located in Vigo County.

| Pollutant | Status |
|---|---|
| PM-10 | attainment |
| $SO_2$ | maintenance |
| $NO_2$ | attainment |
| Ozone | attainment |
| CO | attainment |
| Lead | attainment |

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and $NO_X$ emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Vigo County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

**Source Status**

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

| Pollutant | Emissions (tons/year) |
|---|---|
| PM | greater than 250 |
| PM-10 | greater than 250 |
| $SO_2$ | greater than 250 |
| VOC | greater than 100, less than 250 |
| CO | greater than 250 |
| NOx | greater than 250 |

1. This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

2. These emissions are based upon the draft Part 70 permit that was placed on Public Notice on March 4, 2000.

**Federal Rule Applicability**

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) All LVHC (low volume high concentration) system components are subject to the National Emission Standard Hazardous Air Pollutants, 40 CFR 63.440, Subpart S (as published in the April 15, 1998 Federal Register). This subpart has not yet been incorporated into 326 IAC. The requirements of this subpart are as follows:

40 CFR 63.440 Applicability.
- (b)(1) The affected source is the total of all HAP emission points in the pulping and bleaching systems.
- (d) Each existing source shall achieve compliance no later than April 16, 2001.

40 CFR 63.441 Definitions.

Pursuant to 40 CFR 63.441 Low Volume, High Concentration or LVHC system is defined to mean the collection of equipment including the digester, turpentine recovery, evaporator, steam stripper systems, and any other equipment serving the same function as those previously listed.

Pursuant to 40 CFR 63.441 High Volume, Low Concentration or HVLC system means the collection of equipment including the pulp washing, knotter, screen, decker, and oxygen delignification systems, weak liquor storage tanks, and any other equipment serving the same function as those previously listed.

40 CFR 63.443 Standards for the pulping system at kraft, soda, and semi-chemical processes.
- (b)(1) At each existing affected source, the total HAP emissions from each LVHC system shall be controlled.
- (c) The LVHC system shall be enclosed and vented into a closed-vent system and

routed to a control device that meets the minimum requirements specified in 40 CFR 63.443(d).

(d) The control device used to reduce total HAP emissions from the LVHC system shall:
  (1) Reduce total HAP emissions by 98 percent or more by weight; or
  (2) Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to ten (10) percent oxygen on a dry basis; or
  (3) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 EC (1600 EF) and a minimum residence time of 0.75 seconds; or
  (4) Reduce total HAP emissions using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone.

(e) Periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40 CFR 63.443(c) and (d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:
  (1) One percent for control devices used to reduce the total HAP emissions from the LVHC system; and
  (2) Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and
  (3) Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

40 CFR 63.450 Standards for enclosures and closed-vent systems.

(a) Each enclosure and closed-vent system specified in 63.443(c) for capturing and transporting vent streams that contain HAP shall meet the requirements specified in paragraphs (b) through (d) of this section:

(b) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in 40 CFR 63.457(e). Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(c) Each component of the closed-vent system used to comply with 40 CFR 63.443(c) that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in 40 CFR 63.457(d).

(d) On each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in 40 CFR 63.443(c) shall comply with either of the following requirements:
  (1) On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or
  (2) For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

40 CFR 63.453 Monitoring requirements.

(a) Each owner or operator subject to the standards specified in 40 CFR 63.443(c) and 40 CFR 63.450(d) shall install, calibrate, certify, operate and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in 40 CFR 63.2 of this part) as specified in paragraphs (b) through (m) of this section. The CMS shall include a continuous recorder.

(b) A CMS shall be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs for each thermal oxidizer used to comply with the requirements of 40 CFR 63.443(d)(1) through (d)(3). Owners and operators complying with the requirements in 40 CFR 63.443(d)(2) or (d)(3) shall monitor the parameter specified and for the temperature and concentration limits specified.

(k) Each enclosure and closed-vent system used to comply with 40 CFR 63.450(a) shall comply with the requirements specified below:

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR 63.450(b) shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.

(2) Each closed-vent system required by 40 CFR 63.450(a) shall be visually inspected every 30 days and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in 40 CFR 63.450(c) measured initially and annually by the procedures in 40 CFR 63.457(d).

(4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR 63.457(e).

(5) The valve or closure mechanism specified in 40 CFR 63.450(d)(2) shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

(6) If an inspection required by (k)(1) through (k)(5) of this section identifies visible defects in ductwork, piping, enclosures or connections to covers required by 40 CFR 63.450, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified.

(m) Each owner or operator using a control device, technique or an alternative parameter other than those specified in paragraphs (b) through (l) of this section shall install a CMS and establish appropriate operating parameters to be monitored that demonstrate, to the Administrator's satisfaction, continuous compliance with the applicable control requirements.

(n) To establish or reestablish the value for each operating parameter required to be monitored under paragraphs (b) through (j), (l), and (m) of this section or to establish appropriate parameters for paragraphs (f), (i) and (m) of this section, each owner or operator shall use the following procedures:

(1) During the initial performance test required in 40 CFR 63.457(a) or any subsequent performance test, continuously record the operating parameter;

(2) Determinations shall be based on the control performance and

parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;

(3) The owner or operator shall provide for the Administrator's approval the rationale for selecting the monitoring parameters necessary to comply with paragraphs (f), (i), and (m) of this section; and

(4) Provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

(o) Each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under paragraphs (a) through (n) of this section and established under this subpart. Except as provided in paragraph (p) of this section, 40 CFR 63.443(e), or 40 CFR 63.446(g), operation of the control device below the minimum operating parameter values or above the maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

40 CFR 63.454 Recordkeeping requirements.

(a) The owner or operator of each affected source subject to the requirements of this subpart shall comply with the recordkeeping requirements of 40 CFR 63.10 of subpart A of this part, and the requirements in paragraphs (b) through (d) of this section for the monitoring parameters specified in 40 CFR 63.453.

(b) For each applicable enclosure opening, closed-vent system, the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

(1) Date of inspection;
(2) The equipment type and identification;
(3) Results of negative pressure tests for enclosures;
(4) Results of leak detection tests;
(5) The nature of the defect or leak and the method of detection (i.e. visual inspection or instrument detection);
(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
(7) Repair methods applied in each attempt to repair the defect or leak;
(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
(10) The date of successful repair of the defect or leak;
(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and
(12) The duration of the use of bypass valves on computer controlled valves.

(d) The owner or operator shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in paragraph (a) of this section for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification.

40 CFR 63.455 Reporting requirements.

(a) Each owner or operator of a source subject to this subpart shall comply with the reporting requirements of subpart A of this part as specified in table 1 and all the following requirements in this section. The initial notification report specified under 40 CFR 63.9(b)(2) of subpart A of this part shall be submitted by April 15, 1999.

(d) The owner or operator shall meet the requirements specified in paragraph (a) of this section upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of this subpart due to a process change or modification.

40 CFR 63.457 Test methods and procedures.

(a) An initial performance test is required for all emissions sources subject to the limitations in 40 CFR 63.443, 63.444. 63.445, 63.446, and 63.447, except those controlled by a combustion device that is designed and operated as specified in 40 CFR 63.443(d)(3) or (d)(4).

(b) For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in 40 CFR 63.443, 63.444, 63.445, and 63.447, each owner or operator shall comply with the applicable procedures in paragraphs (b)(1) through (b)(6) of this section.

(1) Method 1 or 1A of part 60, appendix A, as appropriate, shall be used for selection of the sampling site as follows:

(i) To sample for vent gas concentrations and volumetric flow rates, the sampling site shall be located prior to dilution of the vent gas stream and prior to release to the atmosphere.

(ii) For determining compliance with percent reduction requirements sampling sites shall be located prior to the inlet of the control device and at the outlet of the control device; measurements shall be performed simultaneously at the two sampling sites; and

(iii) For determining compliance with concentration limits or mass emission rate limits , the sampling site shall be located at the outlet of the control device.

(2) No traverse site selection method is needed for vents smaller than 0.10 meter (4.0 inches) in diameter.

(3) The vent gas volumetric flow rate shall be determined using Method 2, 2A, 2B, 2C, or 2D of part 60, appendix A, as appropriate.

(4) The moisture content of the vent gas shall be measured using Method 4 of part 60, appendix A.

(5) To determine vent gas concentrations, the owner or operator shall collect a minimum of three samples that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

(i) Method 308 in Appendix A of this part shall be used to determine the methanol concentration.

(iii) Any other method that measures the total HAP or methanol concentration that has been demonstrated to the Administrator's satisfaction.

(6) The minimum sampling time for each of the three runs per method shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

(d) To measure detectable leaks for closed-vent systems as specified in 40 CFR 63.450 or for pulping process wastewater collection systems as specified in 40 CFR 63.446(d)(2)(i), the owner or operator shall comply with the following:

(1) Method 21, of part 60, appendix A; and

(2) The instrument specified in Method 21 shall be calibrated before use

according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

(e) To demonstrate negative pressure at process equipment enclosure openings as specified in 40 CFR 63.450(b), the owner or operator shall use one of the following:

(1) An anemometer to demonstrate flow into the enclosed opening;

(2) Measure the static pressure across the opening;

(3) Smoke tubes to demonstrate flow into the enclosure opening; or

(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

(f) For purposes of complying with the requirements in 40 CFR 63.443, 63.444, and 63.447, the owner or operator shall measure the total HAP concentration as one of the following:

(1) As the sum of all individual HAP's; or

(2) As methanol.

(i) To demonstrate compliance with the mass emission rate, mass emission rate per megagram of ODP, and percent reduction requirements for vent gas streams specified in 40 CFR 63.443, 63.444, 63.445, and 63.447, the owner or operator shall use the following:

(1) The total HAP mass emission rate shall be calculated using the following equation:

$$E = K_2 \left[ \sum_{j=1}^{n} C_j M_j \right] Q_s$$

Where:

E = Mass emission rate of total HAP from the sampled vent, kilograms per hour.

$K_2$ = Constant, $2.494 \times 10^{-6}$ (parts per million by volume)$^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 EC.

$C_j$ = Concentration on a dry basis of pollutant j in parts per million by volume as measured by the test methods specified in paragraph (b) of this section.

$M_j$ = Molecular weight of pollutant j, gram/gram-mole.

$Q_s$ = Vent gas stream flow rate (dry standard cubic meter per minute) at a temperature of 20 EC as indicated in paragraph (b) of this section.

n = Number of individual pollutants, i, summed to calculate total HAP.

(2) The total HAP mass emission rate per megagram of ODP shall be calculated using the following equation:

$$F = \frac{E}{P}$$

Where:

F = Mass emission rate of total HAP from the sampled vent, in kilograms per megagram of ODP.

E = Mass emission rate of total HAP from the sampled vent, in kilograms per hour determined as specified in

paragraph (i)(1) of this section.

P = The production rate of pulp during the sampling period, in megagrams of ODP per hour.

(3) The total HAP percent reduction shall be calculated using the following equation:

$$R = \frac{E_i - E_o}{E_i}(100)$$

Where:

R = Efficiency of control device, percent.

$E_i$ = Inlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this section.

$E_o$ = outlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (i)(1) of this section.

(k) To demonstrate compliance with the total HAP concentration limit of 20 ppmv in 40 CFR 63.443(d)(2), the concentration measured using the methods specified in paragraph (b)(5) of this section shall be corrected to 10 percent oxygen using the following procedures:

(1) The emission rate correction factor and excess air integrated sampling and analysis procedures of Methods 3A or 3B of part 60, appendix A shall be used to determine the oxygen concentration. The samples shall be taken at the same time that the HAP samples are taken.

(2) The concentration corrected to 10 percent oxygen shall be computed using the following equation:

$$C_c = C_m\left(\frac{10.9}{20.9 - \%O_{2d}}\right)$$

Where:

$C_c$ = Concentration of total HAP corrected to 10 percent oxygen, dry basis, parts per million by volume.

$C_m$ = Concentration of total HAP dry basis, parts per million by volume, as specified in paragraph (b) of this section.

$\%O_{2d}$ = Concentration of oxygen, dry basis, percent by volume.

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart S.

**State Rule Applicability - Individual Facilities**

There are no State Rules specifically applicable to the installation of this control equipment.

**Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM and VCAPC, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no monitoring requirements beyond those specified in the applicable NESHAP (40 CFR 63, Subpart S)

**Conclusion**

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 167-11920-00022.